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BIRDS OF THE CLEAR CREEK DISTRICT, COLORADO.

BY F. C. LINCOLN.

WHILE it is probably true that local lists are more or less tiresome to those entirely unacquainted with the region treated, it is nevertheless, quite as obvious that to the workers of any given territory, an accurate résumé of any portion of it, is of a distinct value. Particularly is this the case when the time comes for the ultimate comprehensive work which will sum up and combine the efforts of many individuals in many districts.

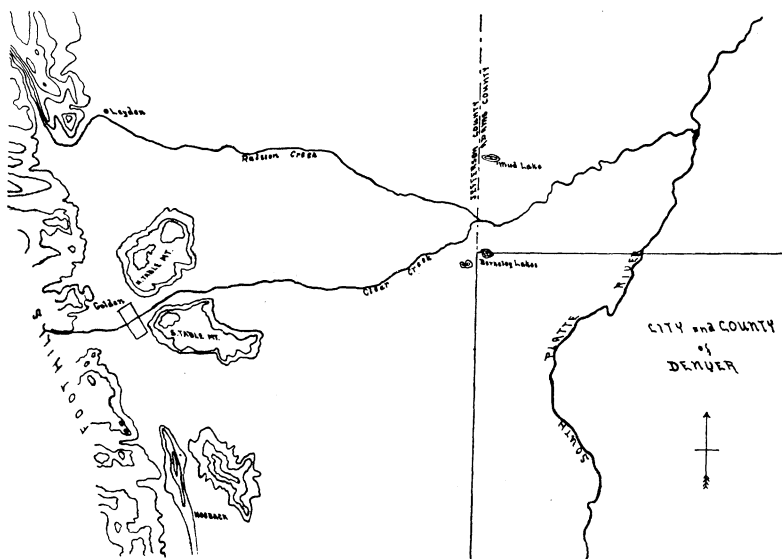
Recent years have seen several of these lists from Colorado, some of them containing much valuable data relative to the State's ornithology, and graphically contradicting the statement that Colorado has been "well-worked," although to those intimately associated with Colorado and her birds the fallacy was perfectly apparent. To fully appreciate this condition one had only to consider the extent of the State, the greatly varied topography and environment, coupled with the numerous life zones; all of which combine to produce an area where conclusive results are obtainable only after long and arduous activities.

Accordingly, with the feeling that he is adding to the knowledge of Colorado's ornithology, the author submits the following annotated list of the birds of the Clear Creek District.

Clear Creek valley proper extends from its junction with the South Platte River in Adams County, near Denver, to the mouth of its canyon in the foothills at Golden, Jefferson County. At the union of the creek with the Platte River the valley is approximately a mile and a half in width, narrowing gradually westward to about a quarter of a mile before passing between the North and South 'Table Mountains,' immediately east of Golden, the old territorial capital. West of the Table Mountains and separating them from the foothills, lies a narrow, steadily ascending lateral, or "paradox" valley, known as 'Hogback Valley,' in which the town of Golden is located, and of which about four miles to the north and the same to the south is tributary to Clear Creek. Beyond this are the foothills of the Front Range, marking the dividing line

between the Transition and Upper Sonoran life zones, in which latter the entire valley is located. Here agricultural activity with much irrigation has long been carried on effectively, but until recently considerable areas were in their natural wild state, with masses of impenetrable bushes, extensive swamps and groups of large trees, usually immediately adjoining the cultivated fields, thus offering ideal environments for many varieties of birds.

On the north and south bluffs overlooking the valley, are num-



erous thickets of Wild Plum (*Prunus americanus*), Choke-cherry (*Prunus melanocarpa*), and Hawthorn or Thorn-apple (*Crataegus*), where small streams fed by springs and seepage from the irrigated tracts, find their source. These streams form sloughs, heavily fringed with Willow (*Salix amygdaloides*), and Birch (*Betula fontinalis*), and supporting masses of Watercress (*Roripa*). In places they widen out into swampy ponds containing dense growths of cattails and tules with small areas of open water. Small groves of Broad-leaved Cottonwood (*Populus occidentalis*), and Box Elder, (*Rulac texanum*), are also of regular occurrence throughout the length and breadth of the valley.

The western edge of the district is marked by the Yellow Pine covered foothills, supporting many forms that wander into the valley after nesting time or follow it as a migrational highway.¹

North of the mouth of Clear Creek Canyon about eight miles, Ralston Creek, a left-hand tributary, leaves the foothills. This stream is small but deep and sluggish, and scantily wooded. After flowing past the Leyden mines it enters Clear Creek valley but nevertheless, maintains some semblance of an individual valley for several miles. Passing through the town of Arvada, it empties into Clear Creek a few miles above the junction of the latter with the South Platte River.

At irregular intervals, on both the north and south slopes of the valley, are numerous natural lakes, many of which are now put to practical uses, principally irrigation. Two, on the south slope, at the suburban town of Berkeley, are passed regularly in going to and from the lower valley on the interurban electric railway, and although the interval when they may be scanned for birds is brief, they have nevertheless, been the means of adding a few species to the list. Such records will be noted as "the lakes at Berkeley."

Another lake, on the north slope of the valley, known locally as Mud Lake, has also been visited spasmodically, and has yielded an additional portion.

Systematic work by the writer was begun in the spring of 1908. One day trips were made regularly, the average for 1910, 1911, and 1912 being thirty-five to the year, or of greater frequency than one each two weeks. During migrations they were made at least weekly, and occasionally semi-weekly, the longer intervals falling in the mid-summer and winter periods. An endeavor was made to render a complete record of breeding activities, by establishing permanent camps during June 1909, and June 1910, with an additional camp in the fall of the latter year. The total result of these operations is a number and variety of forms hardly to be expected in such a limited area.

¹ This country to the west has been ably treated by Messrs. R. B. Rockwell and Alexander Wetmore. (Auk, Vol. XXXI, No. 3, 'A List of Birds from the Vicinity of Golden Colorado.' The present writer periodically visited this country (together with the Hogback ridge to the south) and secured species not recorded in the above mentioned paper. They will accordingly be incorporated in this list with due reference to the locality. F. C. L.

In almost every case the actual specimens have been secured and preserved, my collections from the district numbering about five hundred specimens, and in no case have species, based upon purely visual observations, been included which would in any sense constitute "records" for the State avifaunal list. Compilations have in this instance also been generally avoided, for, while the pioneer literature on the State's birds gives many interesting notes from this region (visual or specimens unpreserved) the absence of subsequent confirmation as well as their general indefinite nature, makes their authenticity a matter of grave doubt. I have accordingly confined myself to my own observations and collections with a few notes on certain species from the collections of the Colorado Museum of Natural History and the private collection of Mr. Egmont Rett, now of the same institution.

Mr. Rett's work in the valley began at approximately the time that my own ended, and has continued without interruption up to the present time. In addition to securing specimens which serve to confirm several of the writer's observations, he has obtained others that add species to the list. So with a view toward completeness, I proposed that he permit me to incorporate his notes and records in the present paper, to which he has graciously consented. I accordingly desire to take this opportunity to express to him my appreciation of his hearty co-operation.

***Æchmophorus occidentalis*.** WESTERN GREBE.—Accidental. One record; a specimen taken on Mud Lake, October 29, 1916, is preserved in the Museum collections.

***Colymbus n. californicus*.** EARED GREBE.—Mr. Rett reports Eared Grebes as fairly common of late years on Mud Lake during migrations. A few killed there every year by hunters who know them (together with the next) as "hell-divers."

***Podilymbus podiceps*.** PIED-BILLED GREBE.—Not common, but still noted regularly throughout the summers on the lakes, where they no doubt breed.

***Larus delawarensis*.** RING-BILLED GULL.—Rare. Four examples of this bird observed on the lakes at Berkeley, September 22, 1912.

***Sterna forsteri*.** FORSTER'S TERN.—Rare. Mr. Rett reports two birds on the Berkeley lakes during September, 1916. These lakes offer an abundant food supply and the species should be more common, at least during migrations.

Hydrochelidon n. surinamensis. BLACK TERN.—Rare. A single bird of this species was seen over a small pond close to the Creek, August 19, 1910.

Anas platyrhynchos. MALLARD.—Not common. A few seen regularly throughout the winters.

Chaulelasmus streperus. GADWALL.—Not common. Feeds in the water-cress ponds in small numbers during the winters.

Nettion carolinense. GREEN-WINGED TEAL.—Common at times during the fall migration. Occasionally found in irrigation ditches or even on the swiftly moving creek.

Querquedula discors. BLUE-WINGED TEAL.—Although this little duck nests commonly within twenty miles of Clear Creek, they are never common here, a few pair usually making up the complement for the season.

Spatula clypeata. SHOVELLER.—Mr. Rett noted a flock of about 30 individuals feeding in a field, flooded by an overflow, April 7, 1918.

Charitonetta albeola. BUFFLEHEAD.—Accidental. On November 3, 1912, I saw three females and one male at the edge of one of the lakes at Berkeley. This was within thirty feet of the rails of the electric road but they paid but scant attention to the passing cars. This duck is rarely more than common anywhere in Colorado.

Botaurus lentiginosus. BITTERN.—Rare. One secured from a willow patch bordering one of the seepage streams, August 29, 1910.

Ardea h. herodias. GREAT BLUE HERON.—Summer resident; nests near the Creek and the solitary figure of this bird is a regular feature of the Clear Creek landscape. From two to four would be noted daily.

Nycticorax n. naevius. BLACK-CROWNED NIGHT HERON.—Common summer resident although I have never found their nests in this vicinity.

Rallus virginianus. VIRGINIA RAIL.—Resident and fairly plentiful. More specimens have been taken in the winter than summer months. Adult and three downy young seen July 30, 1910.

Porzana carolina. SORA.—Rare. But two records are available; one by myself on August 27, 1911, and another from the same section taken May 29, 1912, in the Museum collections.

Fulica americana. COOT.—A plentiful summer resident on the small akes in the valley.

Gallinago delicata. WILSON'S SNIBE.—Resident, but very erratic in its time of greatest abundance. Generally, however, it is more numerous in the fall or in mild winters. One secured March 26, 1913, from an irrigation ditch not two feet wide running through a sandy country.

Totanus melanoleucus. GREATER YELLOWLEGS.—Rare. An occasional example noted with flocks of *T. flavipes*.

Totanus flavipes. YELLOWLEGS.—Fairly common during fall migrations; rarely seen in the spring.

Helodromas s. cinnamomeus. WESTERN SOLITARY SANDPIPER.—On August 23, 1910, I secured one specimen of this bird from a flock of

about a dozen. A few scattered pair were subsequently noted during September. The next year another was secured on August 27, and their presence noted for about a month. Mr. Rett reports a specimen in his collection taken October 13, 1918, which is a couple of weeks later than my records.

Catoptrophorus s. inornatus. WESTERN WILLET.—Rare; two noted August 27, 1911, with a small flock of *T. flavipes*.

Bartramia longicauda. UPLAND PLOVER.—Accidental; a solitary bird was observed August 29, 1910, and Mr. Rett secured another August 15, 1915, but so badly shot as to be unfit for preservation.

Actitis macularia. SPOTTED SANDPIPER.—Common summer resident; remains until October 1. Have found downy young on July 25.

Oxyechus vociferus. KILLDEER.—Resident; plentiful. The incessant calling of one of these birds loses much of its 'wild charm' when by its noise it succeeds in frightening a desired specimen. They are usually in flocks by the middle of August.

Colinus v. virginianus. BOBWHITE.—At present it is necessary to refer the Bobwhites of this District tentatively to the eastern variety, as they are the descendants of stock introduced from the east, and are quite distinct from the native birds of the eastern section of the State, *C. v. taylori*.¹ Nevertheless, environmental and climatic changes have done their work and the birds of the Creek valley do not compare perfectly with typical *virginianus* from the east.

Phasianus torquatus. RING-NECKED PHEASANT.—Introduced; plentiful, and steadily increasing although but little loved by the farmers who accuse them of serious damage to crops.

Dendragapus o. obscurus. DUSKY GROUSE.—In late summer the females lead their half-grown young to the lower slopes of the foothills where an abundance of insect life and berries is obtainable. On September 4, 1911, I secured three birds near Golden within a quarter of a mile of the valley flats. The crops of all were crammed with the berries of kinnikinnick. Not as common now as formerly.

Zenaidura m. marginella. WESTERN MOURNING DOVE.—Abundant summer resident. Have taken fresh eggs as late as August 30, and found fresh shells by May 7. In mild seasons some remain until the first of November and I have one record for the middle of January, but this may have been a crippled bird.

Circus hudsonius. MARSH HAWK.—Not uncommon in the summer and may nest.

Accipiter velox. SHARP-SHINNED HAWK.—Fairly common in the winter months. Have seen them attack and cripple birds as large as the Flicker (*Colaptes c. collaris*).

¹ Pro. Bio. Soc. of Wash. Vol. XXXVIII, pp. 103-104, "Description of a New Bobwhite from Colorado," by F. C. Lincoln.

Accipiter cooperi. COOPER'S HAWK.—Rare. One seen a few times in the winter of 1908-1909, and another February 5 and 12, 1910.

Astur a. atricapillus. GOSHAWK.—Rare or accidental. The only record is one found dead by Mr. Rett, February 25, 1917. Near it were the remains of a large Plymouth Rock hen.

Buteo b. calurus. WESTERN RED-TAIL.—The commonest large hawk. One taken October 5, 1907, had both feet, the mandible, and a quantity of flesh of a chicken apparently freshly killed, in its crop. This is the only instance of their attacking poultry that I have ever noted and it is of course possible that this may have been taken in the form of carrion.

Archibuteo l. sancti-johannis. ROUGH-LEG.—Seen occasionally during the winter. On December 26, 1910, I surprised one feeding on a house cat that I had killed a week before.

Aquila chrysaetos. GOLDEN EAGLE.—Seen occasionally around the foothills.

Falco mexicanus. PRAIRIE FALCON.—Summer visitant. Nests in the Garden of the Red Rocks, eight miles to the south, but only seen in this district when on foraging expeditions.

Falco s. sparverius. SPARROW HAWK.—Rare. A pair, evidently preparing to nest, taken April 8, 1911, now mounted in the collection of Colorado birds at the Museum, are referable to true *sparverius*.

Falco s. phalaena. DESERT SPARROW HAWK.—All other specimens secured seem referable to this variety, which is a plentiful summer resident. A set of five eggs was taken from an old Magpie's nest, May 22, 1909, although woodpecker holes are usually preferred.

Asio wilsonianus. LONG-EARED OWL.—Resident; common at times. On April 8, 1911, in a patch of timber and weeds about an acre in extent, one Rocky Mountain Screech, one Long-eared, one Short-eared and one Western Horned Owl, were seen. On December 31, 1909, six Long-eared Owls were noted, three of them being together in an old Magpie's nest. This species is occasionally noted hunting in the daytime.

Asio flammeus. SHORT-EARED OWL.—Not common. In addition to the one noted above, I have one taken February 19, 1910, but Mr. Rett reports 12 observed in a low swampy field, November 25, 1917.

Otus a. maxwelliæ. ROCKY MOUNTAIN SCREECH OWL.—Common. Nests by the first of April in old woodpecker holes. The usual operation of pounding smartly on the tree is not always efficacious in bringing them out, some having to be pulled bodily from the hole, an operation they are well fitted to resist. Some holes seem to be especially favored and I have taken as many as five different birds from one Flicker hole in one season.

Otus a. aikenii. AIKEN'S SCREECH OWL.—Rare. A few specimens have been taken that are nearly typical of this small form.

Bubo v. lagophonus.¹ NORTHWESTERN HORNED OWL.—The specimen

¹ Cf. Oberholser, Proc. U. S. Nat. Mus., 1904, p. 185. This form is not separated from *B. v. saturatus* in the A. O. U. Check-List.

of this race taken by Rockwell and Wetmore, now at the Colorado Museum, is from this district.

Bubo v. pallescens. WESTERN HORNED OWL.—Rare. One taken April 8, 1911.

Speotyto c. hypogæa. BURROWING OWL.—A few may generally be noted at a 'dog-town' near the mouth of the Creek. Mr. Rett tells me he secured a bird at this point by digging it out in May, 1915.

Coccyzus a. americanus. YELLOW-BILLED CUCKOO.—A few Yellow-billed Cuckoos may be noted every spring and fall and of a series submitted to the Biological Survey for determination three were returned as *americanus* and one as *occidentalis*. *C. a. americanus*, however, is assumed to be the common form in eastern Colorado.

Coccyzus a. occidentalis. CALIFORNIA CUCKOO.—Rare. Noted with *C. a. americanus*.

Coccyzus erythrophthalmus. BLACK-BILLED CUCKOO.—Black-billed Cuckoos are decidedly rare anywhere in Colorado and the two birds from this district form the fourth and fifth records for the State. Strangely enough, they were taken a year apart to the day, July 30, 1910 and July 30, 1911, and within a half mile of each other. (Coll. F. C. L. 122 and 242). The first had been feeding on the larvæ of the tent caterpillar, and its crop and stomach were furred with their spines.

Ceryle a. alcyon. BELTED KINGFISHER.—A regular summer resident here as on almost every creek in the State, though rarely more than one pair noted during the season.

Dryobates v. monticola. ROCKY MOUNTAIN HAIRY WOODPECKER.—Winter resident, common. Usually solitary, but occasionally two or three will be noted together. Observed as early as the first of September.

Dryobates p. homorus. BATCHELDER'S WOODPECKER.—Winter resident, common. Seen in about the same numbers as *D. v. monticola*. Specimens rarely have the white pure, being soiled by contact with the bark of the cottonwoods.

Dryobates p. medianus. DOWNY WOODPECKER.—Mr. Rett's record of this form (Auk XXXV, 1918, p. 223) from this district, is of exceptional interest as additional evidence of the westward movement of many birds generally considered as purely 'eastern.'

Sphyrapicus v. nuchalis. RED-NAPED SAPSUCKER.—Rare. Noted by me on two or three occasions and Mr. Rett's collection contains a specimen taken May 12, 1918.

Sphyrapicus thyroideus. WILLIAMSON'S SAPSUCKER.—Rare, and only seen once or twice in the Yellow Pines at the western edge of the district.

Melanerpes erythrocephalus. RED-HEADED WOODPECKER.—Common summer resident. Arrives about May 25, and remains until the first of November.

Asyndesmus lewisi. LEWIS'S WOODPECKER.— Fairly common winter resident and a few have been seen throughout the summer although I have never known them to nest below the Yellow Pine zone in this section of the State.

Colaptes c. collaris. RED-SHAFTED FLICKER.— Abundant resident. Usually mated before the winter snows have melted.

Phalænoptilus n. nuttalli. POOR-WILL.— Rare. One was repeatedly flushed September 21, 1907, but was not secured. Mr. Rett, however, obtained a fine specimen May 20, 1917.

Chordeiles v. henryi. WESTERN NIGHTHAWK.— Summer resident, plentiful. Arrives about the first of June and frequently remains until the first of October unless driven out by early storms.

Aeronautes melanoleucus. WHITE-THROATED SWIFT.— Rare. Noted only during spring migrations, when a few will be observed flying toward the mountains.

Selasphorus platycercus. BROAD-TAILED HUMMINGBIRD.— Not common. Most of the hummers of this region seem to prefer the environs of Denver where an abundance of flowers is assured throughout the summer.

Tyrannus tyrannus. KINGBIRD.— Summer resident, common. Arrives by the middle of May and is nesting by June first.

Tyrannus verticalis. ARKANSAS KINGBIRD.— Summer resident; rather more common than *T. tyrannus*. Arrives and nests about the same dates.

Myiarchus c. cinerascens. ASH-THROATED FLYCATCHER.— Rare. A specimen taken from a willow thicket, September 17, 1911, and a report of one seen May 26, 1912, by the late E. P. Schuetze, are my only records.

Sayornis phœbe. PHŒBE.— Rare. But one record; a specimen (the second record for Colorado) was taken by Mr. F. L. Kemmerling, September 17, 1911, and is now in my collection (Coll. F. C. L. No. 454).

Sayornis sayus. SAY'S PHŒBE.— Summer resident, not uncommon. Arrives early in April and generally selects deserted out-buildings or bridges as nest sites.

Nuttallornis borealis. OLIVE-SIDED FLYCATCHER.— Rare, migratory. Mr. Rett reports two observed September 9, 1917, associated with a number of Western Wood Pewees, and one other secured May 17, 1918.

Myiochanes r. richardsoni. WESTERN WOOD PEWEE.— Summer resident; perhaps the most common of the small flycatchers. More frequently heard than seen.

Empidonax difficilis. WESTERN FLYCATCHER.— Rare; seen and taken only during August and September.

Empidonax t. trailli. TRAILL'S FLYCATCHER.— Summer resident. From June 12 to 19, 1910, this flycatcher was very common and was evidently nesting in the dense thickets of wild plum, although no nests were found. Several specimens were taken.

Empidonax t. alnorum. ALDER FLYCATCHER.— Rare. A specimen

of this variety was secured on June 4, 1911, the second record for the State, and another on August 6, 1911. (Auk, Vol. XXX, p. 112). At the time Empidonaces were common and it is not improbable that persistent collecting of the genus would have revealed still other examples.

Empidonax minimus. LEAST FLYCATCHER.—Rare. Only noted on migration. I secured a pair August 8, 1911, and Mr. Rett's collection contains one taken August 30, 1914.

Empidonax wrighti. WRIGHT'S FLYCATCHER.—Rare or accidental. Mr. Rett's collection includes a specimen of this species taken May 19, 1918 (Coll. E. R. No. 291). This probably marks the eastern limits of the species.

Otocoris a. leucolæma. DESERT HORNED LARK.—Winter resident, abundant.

Otocoris a. enthymia. SASKATCHEWAN HORNED LARK.—About thirty per cent of the specimens secured in the winter are referable to this variety. Although not recognized by the A. O. U. Committee, my specimens seem to uphold its characters as their differences from *leucolæma* are quite pronounced and agree with the characters of no other race.

Pica p. hudsonia. MAGPIE.—Plentiful resident. A feature of the landscape that would be missed were they exterminated as has been advocated. One cannot but admire them despite their rascality. Complete sets of eggs found March 31.

Cyanocitta s. diademata. LONG-CRESTED JAY.—Common winter resident in the valley. Resident in the foothills.

Aphelocoma woodhousei. WOODHOUSE'S JAY.—Winter resident; common some years, and entirely absent at others. Generally, they are more readily approached than *C. s. diademata*.

Corvus b. brachyrhynchos. CROW.—Not common. One noted November 19, 1910. Dr. W. H. Bergtold has recently shown (Auk, XXXVI, pp. 198-204) that the Crows of the eastern portion of Colorado are principally of this subspecies. The occasional examples seen in the Clear Creek District are therefore, so referred. No specimens have been taken.

Cyanocephalus cyanocephalus. PINON JAY.—I am indebted to Mr. Rett for the opportunity to include this bird. He tells me that on October 24, 1915, a flock of about 50 individuals was seen, two being secured. They were subsequently noted weekly until November 25, when he again secured specimens. They had not been observed in the valley previously, nor since, to my knowledge.

Dolichonyx oryzivorus. BOBOLINK.—Rare. The only record is a specimen in the moult, taken August 5, 1911 (Coll. F. C. L. No. 248).

Molothrus a. ater. COWBIRD.—Summer resident, common. Red wings, Yellow-heads and Yellow-throats seem to be the species most generally imposed upon in this region.

Xanthocephalus xanthocephalus. YELLOW-HEADED BLACKBIRD.—

Summer resident, plentiful. Almost every cattail swamp will contain a small colony.

Agelaius p. fortis. THICK-BILLED RED-WING.— Abundant resident. Females not common or rare in winter. Nests with equal readiness in the willow thickets and cattail swamps.¹

Sturnella neglecta. WESTERN MEADOWLARK.— Resident; plentiful. Only males noted during the winter.

Icterus bullocki. BULLOCK'S ORIOLE.— Summer resident; common. A regular arrival on May 7 or 8.

Euphagus carolinus. RUSTY BLACKBIRD.— Rare. The only record is a female taken from a small flock of Red-wings, April 14, 1912 (Coll. F. C. L. No. 125).

Euphagus cyanocephalus. BREWER'S BLACKBIRD.— Occasionally, an abundant spring and fall migrant, while a pair or two will rarely remain and nest. A flock, estimated at two thousand individuals noted August 20, 1910.

Quiscalus q. æneus. BRONZED GRACKLE.— Although a fairly common breeder in the parks of Denver, but few have been observed in this District; all in June.

Carpodacus cassinii. CASSIN'S PURPLE FINCH.— Winter resident; plentiful some years. During the winter of 1910-11 they were especially numerous.

Carpodacus m. frontalis. HOUSE FINCH.— Resident; common; more so in winter than in summer when large flocks congregate to feed in the weed patches.

Leucosticte t. tephrocotis. GRAY-CROWNED ROSY FINCH.— Winter visitant to plains and Hogbacks near Golden. A flock numbering several hundred was seen November 24, 1910. On January 1, 1912, one was secured from a 'clay pit' where a small flock had taken refuge from the wind.

Leucosticte t. littoralis. HEPBURN'S ROSY FINCH.— Two perfect examples of this variety were taken on Ralston Creek, near Leyden, January 11, 1913. They were with a flock of *L. t. tephrocotis*, as they generally are and it is not improbable that the large flocks noted near Golden also contained this form.

Leucosticte atrata. BLACK ROSY FINCH.— On January 1, 1912, a fine male of this species was observed with a flock of Gray-crowns. I was within fifteen feet of him but as he was on the edge of a clay pit I did not dare shoot as his recovery from the snow filled pit would have been a doubtful if not hazardous matter.

Acanthis l. linaria. REDPOLL.— Common visitant during certain

¹ *Agelaius p. neutralis* has also been taken east of the mountains in Colorado and intensive collecting among the Red-wings of Clear Creek would no doubt reveal its presence, although all in my series are referable to *fortis*. See Rockwell; (Condor, Vol. X, 1908, p. 93) 'The Red-winged Black-birds of Colorado.'

winters when it feeds extensively on the seeds of the Russian Thistle (*Salsola pestifer*).

Astragalinus t. tristis. GOLDFINCH.—

Astragalinus t. pallidus. PALE GOLDFINCH.—I am not at all satisfied with the published status of these two forms in eastern Colorado, and in this particular District it is exceptionally confusing as one is either a resident, or one a summer and the other a winter resident. The tallest cottonwoods are selected for nest sites and large flocks are of daily note in winter.

Astragalinus p. psaltria. ARKANSAS GOLDFINCH.—Not common. A few noted August 24, 1912, form my only record although it should be more numerous as it nests regularly in Denver, and I have taken it at Morrison, eight miles south.

Spinus pinus. PINE SISKIN.—Winter resident; plentiful. Usually associated with *Astragalinus*. Occasionally arrive by August 20 and I have heard them singing all winter.

Calcarius l. alascensis. ALASKAN LONGSPUR.—Winter resident, common some years. A good series was secured during the winter of 1912. Always associated with *Otocoris* but are readily discernible both by flight and note.

Poecetes g. confinis. WESTERN VESPER SPARROW.—Common migrant, especially in the fall, and a few no doubt nest on the bench lands of the valley slopes.

Passerculus s. alaudinus. WESTERN SAVANNAH SPARROW.—Not common. Taken only on migrations; April 7 to 22, and in the latter part of September.

Ammodramus s. bimaculatus. WESTERN GRASSHOPPER SPARROW.—Rare; one secured and two others seen July 28, 1912, in Hogback Valley, north of Golden, and I have no doubt they had or were nesting there.

Chondestes g. strigatus. WESTERN LARK SPARROW.—Summer resident; common. Arrives about the middle of May.

Zonotrichia querula. HARRIS'S SPARROW.—Winter resident; not common. I believe many of these birds are overlooked as I have found them extremely hard to raise from the dense thickets they frequent. Were repeatedly seen and a few taken during the winter of 1912.

Zonotrichia l. leucophrys. WHITE-CROWNED SPARROW.—Common migrant, always found with *Z. l. gambeli*. Remain at times until the first of December.

Zonotrichia l. gambeli. GAMBEL'S SPARROW.—Plentiful winter resident and present (rarely) to the twelfth of June. Usually a large percentage of each flock will be in the immature plumage.

Spizella m. ochracea. WESTERN TREE SPARROW.—An abundant winter resident. Comes in about the first of October and stays until the middle of March or later, depending upon the severity of the last storms of winter.

Spizella p. arizonæ. WESTERN CHIPPING SPARROW.—Common summer resident. Very abundant in late summer just previous to migration. The dates of arrival and departure of *S. m. ochracea* and *S. p. arizonæ* frequently meet or overlap slightly.

Spizella pallida. CLAY-COLORED SPARROW.—Not common or rare. Only seen during the fall migration.

Spizella breweri. BREWER'S SPARROW.—Not an uncommon fall migrant and I have one taken May 29, 1909.

Junco aikenii. WHITE-WINGED JUNCO.—Winter resident; not uncommon. More numerous in the lower gulches of the foothills.

Junco h. hyemalis. SLATE-COLORED JUNCO.—Not an uncommon visitor and perhaps a resident during the winter months. I secured one April 2, 1911, and found it common during April, 1912, near Golden. I think it probable that many examples of this form are mistaken for *aikenii* or *connectens* and so overlooked.

Junco h. connectens. SHUFELDT'S JUNCO.—Winter resident; plentiful. Generally associated with *mearnsi* or *Spizella m. ochracea*.

Junco h. montanus. MONTANA JUNCO.—Winter resident. Always found in the same flocks and so closely resembling *mearnsi* or *connectens*, many examples of *montanus* escape detection, but I believe they may be ranked as common. Good, though small, series have been secured. Apparently more numerous from January to the middle of April.

Junco h. mearnsi. PINK-SIDED JUNCO.—With *Spizella m. ochracea*, the most abundant winter resident. A few will frequently arrive by the middle of September and May is often advanced before the last has gone north.

Junco p. caniceps. GRAY-HEADED JUNCO.—Common migrant and rare winter resident. Nests in the foothills above Golden. (See Rockwell and Wetmore, 'Birds of Golden, etc.')

Melospiza m. montana. MOUNTAIN SONG SPARROW.—Resident; plentiful.

Melospiza l. lincolni. LINCOLN'S SPARROW.—Migrant; not common. Either a late fall and early spring migrant or else a few remain through the winter as I have taken it in October and March.

Passerella i. iliaca. FOX SPARROW.—The only record for Colorado is the specimen from this district taken November 1, 1916 (Auk, Vol. XXXV, 1918, p. 236). The bird was secured from a willow thicket in a swamp below the south bluffs of the valley, and is an adult male in typical plumage.

Pipilo m. arcticus. ARCTIC TOWHEE.—

Pipilo m. montanus. SPURRED TOWHEE.—Colorado is in the territory where these two geographic races overlap and their status is not very clearly defined. Except with examples absolutely typical, visual identification is impossible, but in a series submitted to the Biological Survey for determination both forms were found in numbers, a slight

advantage resting with *montanus*. The species is resident and fairly common. Nests in June.

Oreospiza chlorura. GREEN-TAILED TOWHEE.—Migrant; not common.

Zamelodia melanocephala. BLACK-HEADED GROSBEAK.—Summer resident; common. Nests in numbers and is one of our sweetest songsters, both sexes joining with no appreciable difference in song.

Passerina cyanea. INDIGO BUNTING.—The occurrence mentioned by Rockwell and Wetmore (Birds of Golden) is from this immediate district and is the only record of recent date.

Passerina amoena. LAZULI BUNTING.—Summer resident; common some years. Arrives late in May and I have found nests with fresh eggs up to the last of July, their lateness suggesting a second set.

Calamospiza melanocorys. LARK BUNTING.—Summer resident; common in the adjoining hay and alfalfa fields. More numerous some years than others.

Passer d. domesticus. ENGLISH SPARROW.—Plentiful. Practically every farm will support a colony and a few seem permanently attached to each bridge. I have noticed no ill effects on the native birds here, although such evidence is abundant enough in Denver where I have successfully used strychnine in combatting them.

Piranga ludoviciana. WESTERN TANAGER.—Migrant. Seen in greatest numbers in late July and August.

Petrochelidon l. lunifrons. CLIFF SWALLOW.—Summer resident; abundant. Arrives about the middle of May and nests in large colonies. Their presence seems welcome around the farms. Migrates early in September.

Hirundo erythrogastra. BARN SWALLOW.—Summer resident; common. Usually arrives a few days earlier than *lunifrons* but in smaller numbers; leaves later in September. They start building very soon after their arrival as I have noted them carrying nest material on May 20.

Tachycineta t. lepida. NORTHERN VIOLET-GREEN SWALLOW.—Migrant. A large flock may generally be noted in the vicinity of Golden about May 20.

Riparia riparia. BANK SWALLOW.—The rarest of the swallows in this district, although nest sites are plentiful and large colonies may be found within fifteen or twenty miles. A specimen secured August 29, 1910.

Stelgidopteryx serripennis. ROUGH-WINGED SWALLOW.—Summer resident; common. Two colonies have nested in the creek bottom for several years. On July 23, 1911, I estimated one of these to contain a hundred and fifty individuals.

Bombycilla garrula. BOHEMIAN WAXWING.—Irregular but abundant winter visitant. During the early months of 1909, they were very abundant in Colorado and large flocks were of daily note on Clear Creek. The non-freezing swamps with their patches of water-cress were especially

avored. A minute snail which is found on this plant, proved to be the attraction. They were noted weekly to April 3.

A more recent visitation of this species occurred early in 1917, the birds appearing in even greater numbers in the Creek valley and surrounding country. A detailed account of this invasion was given by the writer in 'The Auk,' Vol. XXXIV, 1917, p. 341.

Lanius borealis. NORTHERN SHRIKE.—Winter resident; common. My own observations do not serve to verify the defense made of this bird by others, who credit it with the destruction of English Sparrows. This may be true to some extent where the bird frequents city parks, but I have yet to see this species fall as its prey, while I have seen it capture Tree Sparrows, Juncos, Chickadees, Horned Larks, and on one occasion a Hairy Woodpecker was seriously crippled, but saved by my intervention. A quart of wheat with half an ounce of strychnine, used judiciously, will do far more toward eliminating the Sparrows in any one neighborhood, and with less danger to the native birds.

Lanius l. excubitorides. WHITE-RUMPED SHRIKE.—Only noted in the spring migration although it should nest in this vicinity. The account of habits under *borealis* does not apply to this bird if my observations are correct, as I have never seen *excubitorides* kill a bird and believe their food is principally of an insect nature.

Vireosylva olivacea. RED-EYED VIREO.—Rare. A male and female were secured August 18, 1911. They were feeding a young bird which escaped. Other specimens taken May 26, 1912, and August 8, 1912. Most of the Colorado records of this bird are of migrants and I believe the above note is the first actual occurrence of their breeding, reported.

Vireosylva g. swainsoni. WESTERN WARBLING VIREO.—Summer resident; not uncommon. More frequently heard than seen. Occasionally found in small groups (family parties, in all probability) in late July or August.

Lanivireo s. plumbeus. PLUMBEOUS VIREO.—Rare. Only record, a specimen secured June 2, 1912 (Coll. F. C. L. No. 386).

Vermivora virginiae. VIRGINIA'S WARBLER.—Migrant; not common. First of spring usually noted about May 25, when the plum thickets are in bloom. Not often seen in the fall.

Vermivora c. celata. ORANGE-CROWNED WARBLER.—Migratory; common during both spring and fall migrations; the majority of those taken being referable to this form, although a few of the next have also been taken.

Vermivora c. lutescens. LUTESCENT WARBLER.—Migratory; rare. Only two or three specimens of this variety have actually been identified.

Dendroica a. aestiva. YELLOW WARBLER.—Summer resident; common. Arrives about May 15.

Dendroica coronata. MYRTLE WARBLER.—Migrant; not common. Generally associated with flocks of *D. a. auduboni* with which it may be classed as the earliest of the Mniotiltidæ to arrive. Rarely seen in the fall.

Dendroica a. auduboni. AUDUBON'S WARBLER.—Abundant migrant. During the month of May this is one of the commonest birds. Have known them to arrive by April 20.

Dendroica townsendi. TOWNSEND'S WARBLER.—Rare; but two records. The first was taken near Golden, September 4, 1911, and the second, a male in full plumage, in the creek bottom, September 9, 1912. This last was feeding with a flock of Chipping Sparrows in the cottonwoods (Coll. F. C. L. Nos. 295 and 405).

Seiurus n. notabilis. GRINNELL'S WATER-THRUSH.—Migrant; not common. Seen in both spring and fall migrations, as solitary birds or scattered pairs. Have taken several specimens in late May, late August and early September. The willow and birch thickets are their usual retreats.

Oporornis tolmiei. MACGILLIVRAY'S WARBLER.—Migrant; not common. Seen principally in the fall.

Geothlypis t. occidentalis. WESTERN YELLOW-THROAT.—Summer resident; plentiful. Frequents the swamps and thickets and is heard continuously. Another early arrival, closely following *D. a. auduboni*, and nesting by the 1st of June.

Icteria v. longicauda. LONG-TAILED CHAT.—Summer resident; common. An inhabitant of the dense plum thickets where their nests are absolutely safe, even from the reach of an enthusiastic ornithologist. Have heard them sing repeatedly during the night while I have been in camp.

Wilsonia p. pileolata. PILEOLATED WARBLER.—Migrant; abundant. Spring arrivals rarely noted before May 10. Fall migration begins about the middle of August and the last is usually gone by the middle of September.

Wilsonia canadensis. CANADA WARBLER.—This warbler is always rare in Colorado so that Mr. Rett's specimen, taken in this region, May 26, 1917, is of more than local interest. (Auk, XXXV, 1918, p. 229).

Setophaga ruticilla. REDSTART.—Rare. An adult female taken August 24, 1912, is the only record (Coll. F. C. L. No. 415).

Anthus rubescens. PIPIT.—Rare migrant. A flock of four seen October 14, 1911.

Cinclus m. unicolor. WATER OUZEL.—Rare in the creek valley although generally seen in the cañon above Golden. I secured a male, however, several miles from the cañon, November 13, 1910.

Oreoscoptes montanus. SAGE THRASHER.—Apparently a rare migrant in the valley. I secured an immature male near Leyden, July 28, 1912, and Mr. Rett reports one taken September, 1, 1918.

Mimus p. leucopterus. WESTERN MOCKINGBIRD.—Probably a rare summer resident, but records of its occurrence are too few for a definite statement to this effect. I have only seen it in May but this is well within the breeding range and nest-sites are plentiful.

Dumetella carolinensis. CATBIRD.—Summer resident; plentiful.

Arrives before May 15, is nesting by June 10 and fledglings out of the nest are of note by July 15.

Toxostoma rufum. BROWN THRASHER.—Summer resident; common. Arrives, nests and leaves about the same dates as *D. carolinensis*.

Salpinctes o. obsoletus. ROCK WREN.—Migrant; not common. The enormous piles of boulders thrown up in the days of placer mining here, are usually occupied by one or two Rock Wrens during the late summer and early fall. Nests in the foothills.

Catherpes m. conspersus. CAÑON WREN.—Resident, but not common on the Hogback. Their call is exceptionally ventriloquial, and being an adept at dodging behind and beneath rocks and bushes, this handsome wren is hard to locate. Seven noted on this ridge, January 1, 1912, four of which were secured. Their song and call are unusually melodious, even for a wren, and could be confused with no other bird.

Troglodytes a. parkmani. WESTERN HOUSE WREN.—Summer resident; plentiful. The familiar House Wren is found everywhere, where the underbrush is to his liking. On one occasion (June, 1909) a pair made their nest in a crack of a cottonwood, which was so situated, that in order to enter they had first to pass through my tent. Deserted Flicker holes are also used as nesting apartments.

Telmatodytes p. plesius. WESTERN MARSH WREN.—Migrant; not common. Only seen in April. The willows on the right of way of the interurban electric line, are periodically cut and piled, making retreats especially favored by marsh wrens. I have taken a few each year.

Certhia f. montana. ROCKY MOUNTAIN CREEPER.—Rare. I find but three records of the occurrence of this bird in the creek valley, although they are not uncommon in the Yellow Pines of the adjoining foothills. I observed one October 30, 1909, and Mr. Rett has two others taken November 14, 1916 and December 30, 1917.

Sitta c. nelsoni. ROCKY MOUNTAIN NUTHATCH.—Ordinarily, not common in the valley but during September and October, 1910, several were noted and a few secured. More numerous in the foothills.

Sitta p. pygmæa. PYGMY NUTHATCH.—Pygmy Nuthatches are plentiful winter residents of the Yellow Pine zone, but I have never known them to enter the belt of cottonwoods and willows immediately below.

Penthestes a. septentrionalis. LONG-TAILED CHICKADEE.—Winter resident; plentiful. In the fall, both *septentrionalis* and *gambeli* are found in the same flocks, and in about equal numbers, but *gambeli* soon leaves its long-tailed cousins in complete possession for the winter. The Long-tails also reach the valley first, usually by the first of August.

Penthestes g. gambeli. MOUNTAIN CHICKADEE.—Migrant; plentiful. Its absence in the winter is only from the first of November to the middle of March.

Regulus c. calendula. RUBY-CROWNED KINGLET.—Migrant; common, more so some years than others. Generally more numerous in the fall.

Regulus s. satrapa. GOLDEN-CROWNED KINGLET.—Rare. One record; an adult male taken on the Hogback, October 6, 1912 (Coll. F. C. L. No. 424). Another bird that may be found with considerable regularity in winter in the Yellow Pines.

Myadestes townsendi. TOWNSEND'S SOLITAIRE.—Visitant; rare. One (probably the same individual) seen on three occasions, March 30 and 31, and April 1, 1910. Two others noted March 17, 1912. They are common in the vicinity of Morrison, eight miles south.

Hylocichla f. salicicola. WILLOW THRUSH.—Migrant; rare. I secured a single specimen from a willow thicket, May 14, 1910, and Mr. Rett has two others, taken May 19 and 27, 1917. No fall records.

Hylocichla g. guttata. ALASKA HERMIT THRUSH.—Rare migrant. Two specimens are all that are available; one taken May 14, 1910 and the other October 14, 1911.

Hylocichla g. auduboni. AUDUBON'S HERMIT THRUSH.—Migratory; not common. This is the Hermit Thrush that breeds in the mountains of Colorado, but rarely below 7500 or 8000 feet.

Hylocichla u. swainsoni. OLIVE-BACKED THRUSH.—Common migrant. Generally noted in spring about the 20 of May.

Planesticus m. propinquus. WESTERN ROBIN.—Resident; plentiful. Winters in numbers whenever the crop of Thorn-apples (*Crataegus*) is good. A flock, I estimated at 200 individuals wintered in one of these thickets near Morrison, south of Clear Creek, during the winter of 1909-10.

Sialia s. sialis. BLUEBIRD.—My only records of the eastern Bluebird in the valley come from Mr. Rett, who reports taking two October 8, 1916, at which date he saw three others. His collection contains still another example taken from a flock of about twenty Mountain Bluebirds, October 13, 1918.

Sialia m. bairdi. CHESTNUT-BACKED BLUEBIRD.—Personally, I have not taken this form in the valley proper, although I have specimens from the adjacent foothills. But Mr. Rett secured two from a flock of four on the Hogback, April 30, 1917.

Sialia currucoides. MOUNTAIN BLUEBIRD.—Abundant migrant and uncommon summer resident. Large flocks generally pass through the valley in late March, the majority of them retiring to the mountains to nest, but an occasional pair or two remain in the valley throughout the summer.

Colorado Museum Natl. Hist., Denver, Colo.